

The language of the heart and breath: bridging strata, bridging discourses of INFORMATION systems.

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1 Introduction

The systemic functional linguistic (hereafter SFL) tradition may be characterised with respect to two aspects of its approach and intellectual outlook. Firstly, the development of SFL has throughout its history been with a view to integrating the various aspects of the theoretical description, as they have emerged, into a holistic model, identifying the key underlying dimensions by which such a synthesis may be achieved (Halliday 1961; 2003; Matthiessen, 2007)¹. Secondly (and relatedly), SFL has been since its early formulations - indeed, going back to its origins in Firth's Malinowski-inspired ideas about language (Firth 1968b) - a theory designed such as to be open to input from other theoretical, intellectual and indeed disciplinary traditions (Halliday 1974; 1977): it has always had an inbuilt potentiality for the building of bridges between academic domains. But bridges enable traffic in both directions: SFL has also had of course contributions to make to the academic and intellectual world outside of its own disciplinary and theoretical domain.

These considerations are certainly relevant to the field of intonation research. Studies of intonation over the last few decades have tended to be motivated and constrained by the orientation of the investigation, particularly in terms of stratal location. For example, in one type of approach the focus has been on patterns at the phonetic and phonological strata, developing substantial descriptions of phonetic phenomena and their patterning, but leaving questions of grammar, semantics and context, methodologically, as an optional subsequent and secondary step (cf for example Crystal (1969)², and the instrumental and Autosegmental-Metrical (hereafter 'A-M') traditions³). This can be contrasted with the approach from 'above' of the theoretical tradition within which Brazil, for example (Brazil 1975; 1981), and Halliday worked, which sees intonation in terms of its use in discourse and grammar but as a consequence can tend to simplify or minimise the description at the 'lower' strata⁴. In this paper I show how the systemic functional linguistic (SFL) model of intonation (Halliday 1963a&b/2005, 1967; El-Menoufy 1969; Halliday and Greaves forthcoming) not only provides a framework for relating the different views of intonation systems and their use but also acts thus as a bridge between the theoretical and analytical discourses of different traditions within this area of

1 cf Butt (2001: 1818):

Over his extended debate with all areas of linguistics, Halliday has taken up the major questions of the subject and sought integrating proposals, a unifying theory which equips both linguistics and language consumers for resolving the problems that they experience at their different levels of specialisation.

2 For Crystal (1969: 18), 'All that emphasizing a formal, as opposed to a 'semantic' or 'notional' approach to description implies is that, procedurally, considerations of meaning...do not enter in until a stable basis of formerly defined features has been determined.' In intonation studies the emphasis on 'formal' features (as with the instrumental approach) implicates a stratally 'bottom up' approach, prioritising phonetic description.

3 For a comprehensive discussion of intonation study up until the late 1960s cf Crystal (1969); for an equally impressive survey of work up until the late 1980s, cf Tench (1990); for a review of work within the instrumental and A-M traditions, cf Ladd (1996).

4 but cf Brazil et al (1980: 42--44) and (Halliday and Greaves, forthcoming) for examples of a descriptive focus at the phonetic stratum.

linguistics, enabling one to draw upon the strengths of different approaches while transcending their limitations.

I will do this through a consideration of the intonational systems of the textual metafunction, here called collectively INFORMATION systems⁵: INFORMATION DISTRIBUTION (hereafter ID) and INFORMATION FOCUS⁶ (hereafter 'IF'); and as part of a proposal for two new grammatical systems, which I call INFORMATION GROUPING and INFORMATION PROMINENCE. These latter grammatical systems are realised through the phonological systems of RHYTHM (the division into feet) and SALIENCE (the instantiation of an Ictus, or 'beat', 'accent', 'stress'⁷), respectively. I will show the way in which the two sets of systems work together to 'create discourse: text that "hangs together", with itself and with its context of situation' (Halliday and Matthiessen 2004: 87), making successive instantial configurations of interpersonal and ideational meanings relevant both to their prior textual, and situational contexts.

2 INFORMATION DISTRIBUTION and INFORMATION FOCUS

2.1 INFORMATION DISTRIBUTION

Throughout the last century or so studies of intonation have consistently recognised the existence of what has been variously referred to as the 'breath group' (Sweet 1877: 86; Jones 1937: 58; Lieberman 1967), 'phonemic phrase' (Lieberman 1967), 'sense group' (Armstrong and Ward 1926; Schubiger 1958: 9; O'Connor and Arnold 1961: 3), 'tone group' (Jassem 1952, Halliday 1963a/2005), or 'rhythm group' (Van Leeuwen 1982, 1992). In most cases the characterisation of this phenomenon is in terms of the phonological description, the tone group being usually seen as the site of a variety of phonological phenomena⁸, although as the term 'sense group' implies semantic considerations have been implicated. According to Brazil (1975: 4), 'It is common practice to regard a speaker's option to break up a stretch of language into a greater or smaller number of tone groups as having linguistic significance in itself'; although this tends to be with respect to limited cases, for example in making the distinction between defining/non-defining relative clauses, or in distinguishing clause and group complexes as in the following example taken from (Halliday 1963a/2005: 271)⁹:

// he washed // and brushed his hair//

// he washed and brushed his hair //

However, for Brazil himself, whose approach was directed towards incorporating intonational phenomena into a description of discourse semantics, the division into tone groups is seen as (1975: 5) 'a simple reflex of successive choices' from choices within the domain of the tone group. He sees Halliday's proposal for the independent system of TONALITY as (1975: 5) 'a consequence of taking a grammatical view of intonation'. Nevertheless, Van Leeuwen (1992: 231) has shown how what he calls the systems of ACCENT and JUNCTURE function as independent, meaning-bearing phonological resources, adding support for Halliday's theory of tonality despite disagreeing with Halliday's interpretation of the phenomenon:

I will argue that the two most fundamental functions of intonation in English, often seen as realized by 'tone of voice', are in fact realized by rhythm: ACCENT, which attracts the listener's attention to the salient syllable in a rhythmic foot, and

5 The term 'INFORMATION' is used here as an abbreviation for all the systems termed 'INFORMATION...'.
6 better known in its syntagmatic form as 'Given-New', a term first used in Halliday (1963b: 274)).
7 There is considerable terminological inconsistency in this area, or as Ladd (1996: 286n.) put it, 'The terminology in the general area of "accent" is really a mess'.
8 Brazil (1975: 3): 'The provision of a formal definition has usually been related, in the literature, to the task of determining its constituents'.
9 Double forward slash represents a tone group boundary.

JUNCTURE, which segments speech into RHYTHM GROUPS...In other words, it is my view that the notion of 'rhythm group' should replace the notion of tone group, and that it is only superimposed on the basic rhythmic structure that other systems, realized by 'tone of voice', can do their work of signaling the 'given' and the 'new'

For Van Leeuwen (1992: 235) 'JUNCTURE segments 'a group of words which belongs together, semantically and pragmatically, a group of words intended as one "move in the speech act" (Halliday 1967: 30)' and is used for specific social purposes, for example in radio announcing and advertising to increase the level of audience attention.

For Halliday, the system of ID, realised through TONALITY, forms part of the grammatical description of English. This decision to treat tone group division as realising a grammatical system is as much a theoretical one deriving from the general principles of Halliday's systemic functional theory (or 'scale and category grammar', Halliday 1961, as it was originally known) as from a consideration of the phenomenon itself. In the concept which eventually evolved into the stratification dimension as part an explicit account of the principles underlying Halliday's earlier description, one must account for any phenomenon capable of creating meaningful distinctions in discourse at all levels of the theory¹⁰, including grammar¹¹.

Despite its grammatical status in the theory, Halliday's and the SFL community's treatment and use of ID are fairly cursory compared to that of the assignment of 'Given-New' structure, although the phonological and grammatical descriptions are elaborated (cf 1963b/2005: 268-273). This may be because, as Halliday points out (2005: 248-249):

The three systems, tonality, tonicity and tone, play different roles in English grammar. But in any given utterance they are of course operating in interaction with one another, so that we cannot always give a clear account of the meaning of a particular selection in one system in isolation from the others.

That is, the distribution of clausal information into information units, aside from consideration of the grammatical subsystems described by Halliday, can be at least potentially (Halliday 1963a/2005: 251) 'regarded as the distribution of "information points"'¹², as Brazil points out. Yet it is also the case that (Halliday 1963a/2005: 252) 'the choice of how many tone groups...goes a long way towards determining the choice of how many tonics, and where they are located': that is, either TONALITY and TONICITY (or, rather, ID and IF) can be the dominant determining system. There are certainly interesting avenues for research into the use of ID, in addition to Halliday's early grammatical description.

For example, the 'chunking' of clausal discourse into more than one information unit may ascribe additional interpersonal significance (via the choice KEY, realised through tone choice) to a constituent of a clause, thus acting as a sort of interpersonal 'shorthand', suggesting quasi-'statements' that may not, in terms of MOOD grammar, be considered as such. One way to illustrate the semiotic potential of ID is to interpret an orthographic transcript, without punctuation or other transcription conventions, into the spoken mode. The following is taken from a televised current affairs show¹³, an interview between senior journalist Maxine McKew and a member of the public, Christine Rau, whose mentally ill sister Cornelia was mistakenly and illegally detained by the Government's immigration department, DIMIA¹⁴ (this text is hereafter referred to as 'MR'). They are discussing the findings of a

10 Cf Firth (1968a: 19): 'The linguist must be clearly aware of the levels at which he is making his abstractions and statements...'

11 Cf Halliday's famous claim, that (2005: 238) 'all contrast in meaning can be stated either in grammar or in lexis'.

12 A term taken from Hultzen (1959).

13 From the Australian Broadcasting Corporation's Lateline programme (broadcast 03/06/2005: <http://www.abc.net.au/lateline/content/2005/s1384384.htm>).

14 Acronym for 'Department of Immigration Australia'.

legal report on the incident produced for Rau by the Newcastle Legal Centre. This is McKew's opening Question-move of the interview interaction:

M: This latest revelation that in fact as far back as November of last year DIMIA started to think that your sister was Australian how's this gone down with your family

McKew is clearly packaging a lot of background information into this move: the entire utterance is in fact a single clause with preposed Subject - from 'This...Australian' - but having two downranked clauses as part of a paratactic elaboration of the nominal Head 'This latest revelation'. It is a complex construction: so how does McKew manage the flow of clausal information? Below is the tonality analysis, which can be taken to represent the grammatical choices in ID¹⁵:

```
//1 ^ this / latest reve- / lation that in //1 fact as / far  
back as no- */ vember of last //1 year //4 dimia //4 */ started  
to / think that in //1+ fact your / sister was au- */ stralian  
//5 how's */ this gone down with your / family //
```

It is undeniable both that to some extent at least the selections in ID are, if not a result, then at least motivated by or correlated with the internal composition of the clause; and by the selections in Information Focus - certain items are highlighted by McKew as deserving of special attention, thus necessitating more information units. But one can also see that across the seven information units there is as it were a 'prosody' of intensified Focus: it is as though the speaker has, for a period, increased the 'magnification' of her (and her audience's) attention upon the ideational and interpersonal flow of meaning. They also include, as mentioned above, 'statements in shorthand': ideational elements such as the preposed Subject 'This latest revelation', and the two units construing the paratactic elaboration of the prepositional phrase 'as far back as November of last year' are construed textually as though they are downranked Declarative mood choices, in that they could have been construed as a series of independent negotiable propositions, but weren't¹⁶.

Furthermore, all of these 'ministatements' are critical to the issue at hand in the interview, and relevant to the actual negotiable proposition being made: the Content Question asking how Rau's family reacted to this information. By packaging all this information as part of a single proposition McKew ostensibly removes these crucial ideational meanings away from the arena of the interpersonal negotiation; but through their construal as separate information units, with their own interpersonal KEY selections, they seem to lend to the proposition itself all the force of conviction that these 'downranked statements' represent¹⁷, as a series of background evidences of the questionable behaviour of DIMIA. ID is clearly playing an independent role here in the construal of meaning, packaging the flow of discourse into a complex but powerful first move in the interaction.

2.2 INFORMATION FOCUS

As shown in the above text analyses, each tone group division is also a selection of Tonic; so each selection in ID is also a selection in IF. There is not the space here to go into a discussion of the history of study of the phonological phenomenon known variously as the 'nucleus' (Palmer 1922; Schubiger 1958) 'tonic' (Halliday 1963a/2005: 241), 'accent' (Bolinger 1972b: 21), 'sentence stress' (Schubiger

15 For a discussion of the relations of the information unit and tone group, as well as for a detailed discussion of the theory and transcription system employed and adapted here cf (Halliday 1967). A double forward slash represents a tone group boundary; a single slash a foot; the caret ^ a silent Ictus; in tone groups of more than one foot, the asterisk * that the following foot contains the Tonic; the number represents the tone choice - despite space not permitting a discussion of their use, they are referred to in places.

16 The choice in KEY is criterial here: the two tone 4 choices are choices not from the interpersonal KEY but the logical STATUS system (cf Halliday and Greaves forthc), and therefore fall outside the scope of this observation.

17 Perhaps another form of Graduation: Force of evoked negative Appraisal (Martin 2006)

1958, Ladd 1996), or ‘nuclear accent’ (Ladd 1996¹⁸), or its linguistic role. Much of what was said about TONALITY applies here also: for example, according to Crystal (1969: 264) ‘the grammatical functions of tonicity are very much in the minority’; but again, he is talking here about ‘the number of cases of grammatically conditioned tonicity’, suggesting a different idea of grammar from Halliday’s¹⁹. However, the phenomenon has been more widely treated in terms of its role in creating text than ID by scholars within and outside of the SFL tradition, such as Halliday (1976), Chafe (1974), Brown (1983), Fries (1992) and Bowcher (1999; 2004). As Halliday’s significant contribution to the understanding of this phenomenon is widely acknowledged²⁰ and employed²¹, in particular the structural description of ‘Given-New’, I will briefly focus on the grammatical function of the system of TONICITY within the SFL model.

Within an information unit the last content item in an information unit is, in the unmarked case, made Focus/New²², according to the syntagmatic ‘given-new’ structure. Discussions of New are usually from the syntagmatic perspective – ie with respect to the structural relations of Given-New: both within the clause; and, in complementarity with Theme progression (Fries 1992), in terms of the global structuring of a text (‘Method of Development’), as the progression of New (or, in Fries’ terms, in written text, the ‘N-Rheme’), realising the semantic system Martin calls ‘Point’ (cf Martin 1992: 448-460). The syntagmatic view is primarily suited to the study of prototypical (prepared) written monologic text, in terms of the different Theme-Rheme structures available: in a prepared monologue the global text structure can be controlled. However, it is possible to consider the selection of New in paradigmatic terms also²³. In spontaneous spoken dialogic, the choice of Focus is a resource for the co-creation of text, and thus for negotiation of the direction the discursive interaction takes.

In the analysis of the text in the previous section, it was seen that the division into information units resulted in, or was motivated by, several selections in IF, which draw attention to certain key elements of the clausal information, adding these to be taken into account in answering the actual predication of the Question: ‘revelation’; ‘November’; ‘year’; ‘DIMIA’; ‘started’; ‘Australian’; and ‘this’ (= ‘This latest revelation...Australian’). There are two marked New choices: ‘started’; and ‘this’. The functional motivation of the choice of marked Focus on the inceptive process ‘started’ is clear enough: McKew is drawing attention to the inceptive element of the complex mental process of cognition, this textualisation of the temporal phase adding to the marked ID on the two nominal heads of the (marked Theme) Circumstance of Temporal Location which precedes it.

The second use of marked Focus is more complex. In making the anaphoric determiner ‘this’ the culmination of New, McKew makes all the preceding information, which is the referent for ‘this’,

18 Ladd departs from the canonical A-M view in acknowledging the existence of a pitch accent with a (1996: 211) ‘special status’ within the tone group, corresponding to Halliday’s Tonic. Indeed, it is difficult to see how the tone group might otherwise be identified in any principled way within this approach.

19 This common conception of grammar is encapsulated by Bolinger (1972a: 11), writing ‘How does intonation relate to grammar?’: the relation is clearly not one of realisation.

20 cf for example, Brown and Yule’s (1983: 153) assessment of (Halliday 1967b) as an ‘extremely influential article’ in this area.

21 Although aspects of Halliday’s interpretation, particularly with respect to the choice and scope of the terms ‘given’ and ‘new’, are strongly and widely contested.

22 The appropriateness of this term to the semantic function of the Tonic has been widely debated (cf Brown 1983 for a discussion). I will not enter into this debate here, except to make reference to Firth’s comments ‘that in linguistics language is turned back on itself’ (Firth 1957: 121), and also to Halliday’s observations on the ‘ineffability of grammatical categories’ (Halliday 1988). One related issue is that the extent of the domain over which the New extends is indeterminate (cf Martin 1992: 450-451). One could therefore propose to refer to New as ‘Focus’: Focus merely suggests that the lexical element which carries the Tonic has a grammatical function, and that this particular element thus forms the focus of the domain of that grammatical function. However, this term misses the significance of syntagmatic aspect – the structural relations of Given-New complementary to those of Theme-Rheme. I employ both terms here as being interchangeable, although there is an axial complementarity between the two.

23 Cf Bowcher (1999; 2004).

also a part of this New. However, in a sense the complex nominal Head ‘This latest revelation... Australian’ is also Theme, if one includes it as part of the single complex clause, being the first experiential item in that clause. If one considers the preposed Subject not to be part of the clause then the Theme is in fact the Wh-interrogative adjunct ‘How’. It seems that McKew is having two bites of the Thematic cherry; while also making the (preposed) Theme to be New information. Meanwhile, the post-Focal information – the Material/metaphorically Mental process of emotion plus Sensor/Goal ‘gone down with your family’ (congruently, ‘affected your family’) – is treated as an assumed context by the speaker (perhaps to suggest solidarity through the assumption of an ‘insider’s’ status). As a strategy for an opening move in the interview, this complex utterance makes the circumstances surrounding DIMIA’s treatment of Rau’s sister both departure and destination point; while also making her family’s reaction both Theme (‘How’) and (marked) Given. McKew has set the textual parameters of the interactive text and the ‘path through the field’²⁴, to which Rau thereafter adheres closely, thus co-realising a collaborative type of interaction.

In another Lateline interview, this time between interviewer Tony Jones and the (former) Attorney General Phillip Ruddock²⁵, we can see how the assignment of Focus and the resultant ‘navigation’ of the textual interaction actually becomes a point of contention, realising an adversarial type of interview (cf Bell and Van Leeuwen 1994). The following text contains the opening exchanges, transcribed for intonation:

J: //4 ^ are / you at all con- / cerned by the / allegations
that a / network of / chinese */ spies has been //1_ operating
in this */ country //

R: //4_ ^ well I'm / always con- / cerned about er - about
alle- */ gations but er //1 ^ one / has to es- */ tabliah //-3
whether or */ not ah they are //4 real or i- */ maged //1 umm
they / are / just as you have */ asserted at //4 this stage
alle- // gations //

Jones makes his first move with a Polar Question clause over two information units, which gives him the opportunity to make two items of information Focus, (‘Chinese’) spies’ and (‘this’) country’. However, in doing so Jones downranks what would have more congruently been the first point of Focus²⁶, the Phenomenon ‘allegations’, to the textual status of Prominent (cf discussion of this term in Section 3 below): it is not the acknowledgement of the status of the claims as allegations (which is a legal requirement for the public broadcaster) that is given the Focus, but what would have been the ‘nub’ (Subject) of the downranked clause were it ranking, and the Head of the Circumstance locating its downranked event.

Ruddock, however, has different ideas about the ‘point’ of this interaction: he picks up on the downranked Phenomenon, ‘allegations’, making this his point of Focus, and thereafter using this textual shift in direction as the basis for a series of information units focussing on the status of the claims as allegations. In one sense this series of Moves are, in Eggins and Slade’s (1997) terms, Responses, answering the question asked by Jones; but are in another sense Rejoinders, in that Ruddock focuses on the nature of the claims rather than his own lack or level of concern about these claims; and rather than talking about a ‘network of Chinese spies operating in this country’, which was the point of Jones’ question, he prefers to discuss the nature of this ‘assertion’ (which is in fact downranked, and thus not an assertion!). Of course, by downranking the clause ‘that a network...country’ Jones has already moved it away from the realm of interpersonal negotiability: his Polar Question is, ostensibly at least, designed to initiate a debate about Ruddock’s attitude towards the

24 ‘field’ here being used in its technical SFL sense, a parameter of context.

25 Broadcast: 08/06/2005: <http://www.abc.net.au/lateline/content/2005/s1387904.htm>

26 being the Head of the following postmodifying downranked clause.

claim (which does in fact form the fulcrum of the ensuing debate). The point is that textually, in terms of the system of IF, Jones focuses not on the Phenomenon – the ‘allegations’ - but on the content of the allegations themselves²⁷; and that Ruddock chooses to ignore this assignment of textual Focus and chart his own ‘path through the field’ of foreign affairs, espionage and immigration, by first addressing the actual proposition (using the tone 4_ Reserved KEY), but then addressing the ideational meaning of the Adjunct rather than that of the Mood block.

Having accomplished this textual diversion, he then proceeds to instantiate a pathway for the text that is in fact congruent to the initial proposition and Theme, his interest in the matter:

R: //13 ^ the / difficulty for */ me in relation to these */ matters is //1 I can't //4 talk about on- */ going //3 ^ er ac- */ tivities in which our se- / curity agencies are in- */ volved in it //4 compromises them //...

Thematising himself, Ruddock now moves the text into the field of professional roles and propriety. It is a capitulation of sorts to Jones’ initial proposition (cf Bell and Van Leeuwen 1994 on the collaborative aspect of political interviews), but one negotiated on his own terms, via his own textual path (having, in the context of the global interview interaction, made the status of the claims ‘macro-Theme’ (Martin 1992), rather than his concern about them). Ruddock has successfully changed the textual course of the interview, and thus asserted some degree of autonomy in the interview dialogue. This sort of negotiation is characteristic of this text and its type, the adversarial interview. The MR interview follows a different textual pattern, that of a ‘conversation’ type of interview (cf Bell and Van Leeuwen 1994): Rau’s response is very much coherent to the parameters of and direction through the field set up (textually) by McKew:

R: // well to / us it's / rather ex- */ traordinary be- //4 cause it's / lifted the / level of what we */ previously / thought was //4 mere in- */ competence //1 up another */ notch where you //5 think that per- / haps there / has been some sort of / wilful i- */ nertia be- //4 cause / if there had been a / reasonable su- / spicion that / she was an au- / stralian / resident or */ citizen then h - //1_ why on earth did they / keep her in de- */ tention for //1 ten / whole */ weeks //...

Rau’s reply addresses the elements of McKew’s Question which were made Focii – the details regarding the timeframe of DIMIA’s suspicions; but also responds collaboratively to the general tenor of the opening move which, as discussed above, implicitly suggests the negative appraisal which Rau makes explicit in her reply.

Thus we can see in the choices from the system of IF in a spontaneous spoken dialogue the way in which interactants manage the co-creation of text, collaboratively or adversarially. In a written text a writer ‘ties’ an information unit to whatever co-/context s/he chooses: the potential is only that of relevance to the context, which is the local context constructed by the writer through the text. In a dialogic interaction this system is a site where the negotiation of the path through the field of discourse is construed. Successive instantiations must remain coherent to the context; but the course may be changed by either participant, dependent upon their skill with the system of IF.

If Themes are the points of departure, then the News/Focii can be seen as the destination points. A useful metaphor might therefore be that of a journey, or perhaps an extended holiday tour through a region: there are a series of departure points or bases, places/towns/cities (Themes) where the visitor/s will stay for one or several days, and from each of which one or several trips will be made out to various destinations (Focii). In a monologue, one travels alone, planning/choosing one’s journey as

27 There are in fact signals in Jones’ speech that ‘allegations’ would have been congruently his choice of Focus: a distinct shift in rhythm (cf Van Leeuwen 1992) and resetting of the pitch level, normally associated with a new tone group (Crystal 1969: 205; Halliday and Greaves forthcoming).

one pleases. In dialogue, there are travelling companions: the choice of where to go must be negotiated. And a region (field) will change its appearance depending on the (co-constructed) path taken.

3 INFORMATION GROUPING and INFORMATION PROMINENCE

Throughout the spoken texts of the English language there is a pulse that may be likened to that of a heartbeat. This pulse, variously described by most authors studying prosodic phonological phenomena of the English language, as ‘stress’, ‘prominence’, ‘accent’, ‘pitch accent’ etc, has been described by Halliday (1963a/2005), drawing upon work by Abercrombie (1964), as the Ictus, within and defining the domain of the phonological unit called the foot, and forming the basis of what is uniformly termed ‘rhythm’. Although the phonological systems and structure of the foot have been described in the Systemic Functional Linguistics (SFL) framework, the systems of grammar which they realise have not.

Halliday and Matthiessen (2004: 15) claim that ‘the rhythm group, or foot, is largely a timing unit (it has one of two specific functions in the grammar, but its domain of operation is principally phonological)’. Halliday (1963b/2005: 274) suggests one such function:

‘The grammatical meaning of rhythm requires a separate study; as an instance of it might be cited the contrast between // ^ the / question / which he */ asked is // surely ir- */ relevant // (= ‘the question “which did he ask?”’) and // ^ the / question which he */ asked is // surely ir- */ relevant // (= ‘the question that he asked’)’.

However, one can consider this phenomenon in the light of stratal theory: if there is a phonological organisation of sound having a capacity for making distinctions in meaning then surely that in itself justifies a description at all strata within the SFL model²⁸. Part of the problem here, as with elsewhere in the theory of the textual metafunction, may be the difficulty of accounting for INFORMATION systems in systemic terms, because of the second-order nature of these semiotic resources (Matthiessen 1992), mapping as they do, potentially, onto any constituent of the clausal discourse.

Other traditions of intonation study have recognised the importance of the assignment of prominence (although of course under the usual variety of names) and the concomitant rhythms which occur in spoken language, and many have troubled to account for these in terms of meaning. For Brazil, looking from a discourse level perspective, (Brazil 1978:55) the system he calls ‘Prominence’²⁹ ‘represents the speaker’s assessment of the information load carried by the elements of his discourse...a signal that the word must be attended to’. For the Autosegmental-Metrical tradition, working from ‘below’ in stratal terms, the ‘pitch accent’, rather than the nucleus of a tone group (which for many in this tradition is not recognised) is the main site of interacting phonological systems, and scholars such as Pierrehumbert and Hirschberg (1990: 286) have attempted detailed descriptions of their significance:

Pitch accent conveys information about the status of the individual discourse referents, modifiers, predicates and relationships specified by the lexical items with which the accents are associated...Accenting or deaccenting of items in general appears associated with S’s desire to indicate the relative salience of accented items in the discourse. The type of accent chosen conveys other sorts of information status.

However, it is to Van Leeuwen that we owe the most detailed and stratally-integrated account of the use of this resource, which he calls ACCENT. Although, as mentioned earlier, Van Leeuwen’s description differs in important ways from Halliday’s, he works within the broad conceptual framework

28 Cf again Firth (1968a: 24): ‘The abstractions or schematic constructs set up are made at a series of distinct mutually complementary levels’.

29 cf O’Connor and Arnold (1961) for an early and similar use of the term.

of SFL and is thus enabled to relate the phonological description to the higher level strata, in particular semantics and context, and instance to text-type (Van Leeuwen 1992: 233):

Studying what speakers accent can be a way of ‘reading the mind’ of the social institutions within which their speech is located. Thus, if several announcers, in reading the same radio commercial, accent a personal pronoun:

[[if / you’re looking //] [for a / top quality/ used / car //
we can interpret this ‘exception’ to the rule that only content words receive an accent as the realization of a strategy of the social institution of advertising – a strategy of placing emphasis on the ‘personal’ nature of what is in fact one of the most impersonal and distant forms of communication the world has known, a strategy of making the listeners believe that they are personally addressed...

I propose to incorporate these understandings into the current SFL theory of intonational systems, by adding two systems at the rank below ID and IF: INFORMATION GROUPING (hereafter ‘IG’) and INFORMATION PROMINENCE (‘IP’); with the Ictus realising a Prominent, a unit at the rank below Focus. As with ID and IF, it is not easy to show how each of these systems makes an independent contribution to the meaning of texts; as above, actual instances of text provide a view of these systems at work. In the JR text, I showed how the interviewer downranked a lexical item, ‘allegations’, that should congruently have been Focus, to the status of Prominent. One instance of the reverse, where an element is raised to the status of marked IP, is Rau’s assignment of salience on the logical conjunction ‘if’:

/ if there had been a / reasonable su- / spicion...

The elevation in rank can be related, as Van Leeuwen has shown, to the social purpose of the speaker: in this case Rau is presenting the findings of a legal report, and her discourse is patterned with the sort of logical argumentation associated with that field; in this instance, the element realising the logical relation itself is raised to the level of textual attention (as is ‘because’ in the previous information group). There is also as it were a prosody of prominence highlighting the interpersonal elements of Rau’s discourse (in the case of ‘has’ marked Prominence) which betrays her personal involvement in the issue, reminding us that this is as much a personal narrative as quasi-legal text-type:

...where you //5 think that per- / haps there / has been some
sort of / wilful i- */ nertia...

In a similar fashion to McKew’s first move, these selections make each of the interpersonal elements they make Prominent significant in the construal of the proposition, only at the lower rank: they add interpersonal weight, in this case, not via the additional KEY selections enabled by marked ID, but through marked IG and IP on interpersonal elements. Martin has shown how interpersonal meanings tend to be instantiated prosodically across a text (Martin 2006); an importance aspect of these prosodies must surely be the consideration of their textual status. One can see this phenomenon in the assignment of Prominence in Rau’s turn to items such as the two premodifiers ‘wilful’ and ‘rather’. Again, one can see these choices partly in terms of the use of IG, partly IF. But in the final of Rau’s information units in the text sample it is clearly the IG system which is dominant, enabling her to ‘zoom in’ on the evoked negative appraisal of the Circumstance of Temporal Extent:

...for //1 ten / whole */ weeks //...

However, the repeated assignment of Prominence does not necessarily entail marked IG; nor is it in the use of marked Prominence or Grouping only that the analyst may find semiotic phenomena worthy of investigation. As has been discussed above, the paradigmatic potential of INFORMATION systems involves effectively all elements of clausal discourse; thus, each choice is, to some degree, textually meaningful: ‘this’ clausal element as Prominent or New, rather than ‘that’.

As Van Leeuwen shows, one may characterise a text in terms of its membership of a social institution via these systems. Take, for instance, the following from the ‘contest’ (Bell and Van Leeuwen 1994) type of interview exchange between Jones and Ruddock:

```
R: //1 ^ we - look / you're asking / me to offer a */ view //  
R: //4 mmm I //5 am in- //5 deed //5_ yes //
```

It is a critical point in the interview: persistent questioning from Jones provokes Ruddock to offer this comment on the nature of the interview itself, in terms of the roles of the two interactants, ‘you’ and ‘me’ (and the false start ‘we’), assigning each of these personal pronouns Prominence. Bell and Van Leeuwen have shown how in this ‘adversarial’ type of interview the interactants take up established social roles, with the interviewer as the ‘honest broker’ relentlessly pursuing politician on behalf of the viewing public. In these choices in IP Ruddock in a sense draws attention to this aspect of the exchange, its membership of the political interview type: the implication is that Jones has asked Ruddock something beyond his capacity to answer, i.e. outside the scope of his social role. Jones pounces on this, responding with irony by drawing additional attention to his affirmation of Ruddock’s observation through marked ID, and a prosody of interpersonal commitment through a series of Committed KEY selections on positive polar items. The meaning is clear: Jones asserts that it is indeed his role to seek (one the public’s behalf) a view from the public servant. Ruddock’s subsequent reply, not shown here, continues his claim that it is not his place to do so. The point is that the exchange both construes and debates social roles in terms of the nature of the type of interaction; and that the course of this debate is crucially managed through the systems of IG and IP, as well as IF and ID: the textual metafunction enables the interpersonal exchange, as earlier I showed it did the negotiation of the orientation to ideational meaning.

4 Conclusion

As with the description of the systems of ID and IF, those of IG and IP are a resource for the linguist, for a variety of tasks. For example, the selections may be tracked across large corpora in terms of their assignment to interpersonal or ideational mapping so that the analyst can build up a picture of what the metafunctional orientation of the text is, or the type of textual form a text takes. This tracking of these textual systems may reveal important shifts within a text: in another text I have analysed, discourse attending a surgical operation, there is a dramatic shift from a textualisation of mostly ideational items relevant to the material action of the operation, to a focus at both ranks of the information unit on interpersonal elements, as the interactants negotiate their respective tenor roles within the context. In the texts I have discussed above, each of the interactants uses these systems to textualise tenor and field settings in the context, according to their own understandings of and construals of that context.

Halliday has discussed how the tasks the linguist brings to the development of the theory will in many ways determine the shape of that theory (Halliday 1964). It is also clear that the nature of the theory and its modelling will both motivate and constrain the type of investigations conducted and their findings (cf also Matthiessen & Nesbitt 1996). From this perspective, the various approaches to intonation phenomena all have valuable contributions to make: as for instance the detailed views from below of the A-M and other instrumental and experimental laboratory traditions of research, and the discourse perspective of Brazil. One important contribution which can be made by those working within the SFL framework, and an area of fertile ground for future research within this tradition, is to consider the findings of research within other traditions from the perspective of the SFL model.

This is perhaps the chief strength of our multidimensional and holistic approach: those working in SFL have always sought to integrate the results of their researches into the overarching framework of strata, metafunction and the other principles of organisation of the model. As a result, SFL is in a good position both to ‘poach’ ideas from other traditions and relocate them within the multidimensional

framework; as well as to not only identify areas where SFL can make a contribution to other academic domains, but to argue coherently for the value of such contributions. As SFL scholars have found with other translation exercises, the translation from one linguistic metalanguage to another is most effectively managed according to the principles of dimensional cartography. The multistratal approach allows intonation phenomena to be investigated at all levels of description, and so the language and linguistic discourses of the 'breath group' and 'heartbeat' to be related to their use.

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